

# USB2HDMI

## Instruction Manual

# USB to HDMI Video Adapter

**USB 2.0 to HDMI External  
Multi Monitor Video Adapter  
with Audio**

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## **FCC Compliance Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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## Introduction

The USB2HDMI USB HDMI External Dual or Multi Monitor Video Adapter (with Audio) turns an available USB 2.0 port into an HDMI output with high resolution video support (up to 1920x1080) and audio.

The USB HDMI video adapter can be used to mirror your primary desktop, showing the same image on each display, or to extend your desktop to double your workspace and increase your productivity.

This external graphics card is a cost-saving multi-monitor or dual display solution for either laptop or desktop applications, offering the ability to connect an additional HDMI (or DVI) display to your computer setup without the hassle of opening the computer case to install a new video card.

Backed by a StarTech.com 1-year warranty and free lifetime technical support.

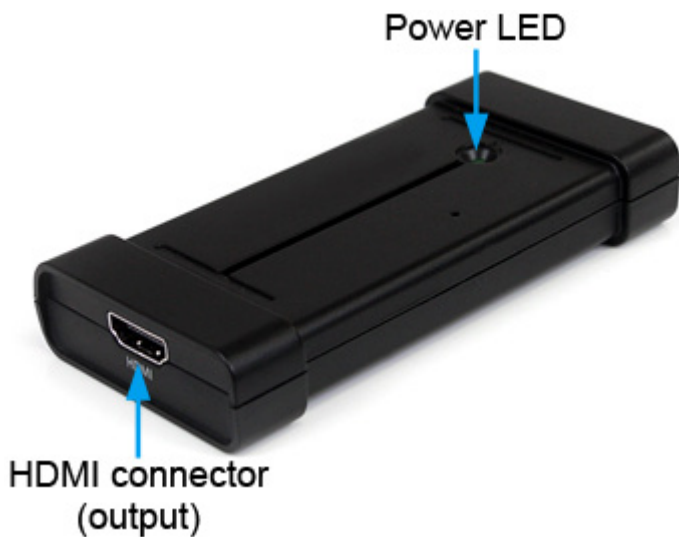
## Packaging Contents

- 1 x USB2HDMI video adapter
- 1 x USB cable
- 1 x Installation CD
- 1 x Instruction Manual

## System Requirements

- USB 2.0 enabled computer system with available USB port
- HDMI enabled display device (e.g. monitor, projector, HDTV, etc)
- Microsoft® Windows® 2000/XP (32-bit)/Vista/7 (32/64-bit),  
or Apple® Mac OS® 10.4.11/10.5.6

Top View



Rear View



# Installation

**Please note:** The following installation steps must be completed prior to connecting USB video adapter to the host computer, to ensure proper functionality.

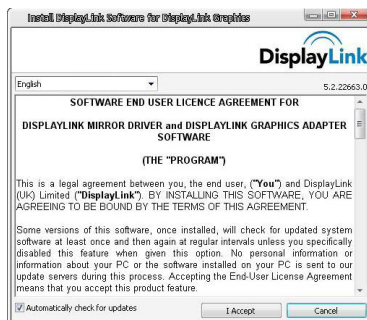
## Windows 2000/XP/Vista/7

1. Insert the Driver CD (included) into the CD/DVD-ROM drive.
2. AutoPlay should launch a Window, giving the option to install the drivers. If AutoPlay is not enabled, browse through the Driver CD and locate the “Setup.exe” file in the USB 2.0 to HDMI folder. Double-click on the installer file to begin the installation process:

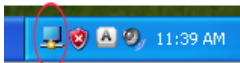


Setup.exe \*actual file name may vary

3. When the End User License Agreement appears, please read and accept it, then click Next.



4. Please wait while the installation package copies the necessary files.
5. Once completed, connect the USB video adapter to the computer. Windows should start to automatically load the drivers. Once complete, you should see this icon in your System Tray:



6. To verify the installation, right-click on “My Computer” and select Manage to open the Computer Management window.

7. In the left pane of the Computer Management window, click on Device Manager.
8. In the right pane of the Computer Management window, click on Universal Serial Bus Controllers, and ensure that the USB display adapter device is listed underneath.
9. If you wish to add additional USB video adapters, simply plug them into available USB 2.0 ports. A maximum total of 6 USB video adapters can be used on a computer.

## Mac OS X (10.4.11/10.5.6)

1. Insert the Driver CD (included) into the CD/DVD-ROM drive.
2. Browse through the Driver CD and locate the “DisplayLink-OSX” .dmg file in the USB 2.0 to HDMI folder. Double-click on this file to begin the installation process:



DisplayLink-OSX.dmg

\*actual file name may vary

3. Double Click the “DisplayLink Software Installer.pkg” to install the software.

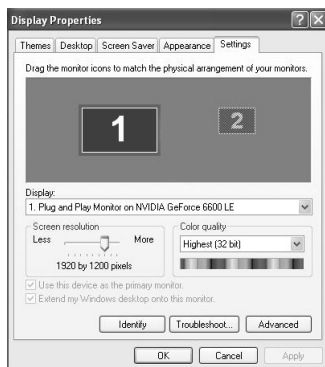


4. Once the installation is complete, click the “Restart” button. The computer will automatically reboot, so make sure to close/save any files you have opened, before pressing this button.
5. After the computer has restarted, plug in the USB video adapter to an available USB 2.0 port. The adapter should now be ready to use.
6. If you wish to add additional USB video adapters, simply plug them into available USB 2.0 ports. A maximum total of 4 USB video adapters can be used on a computer.

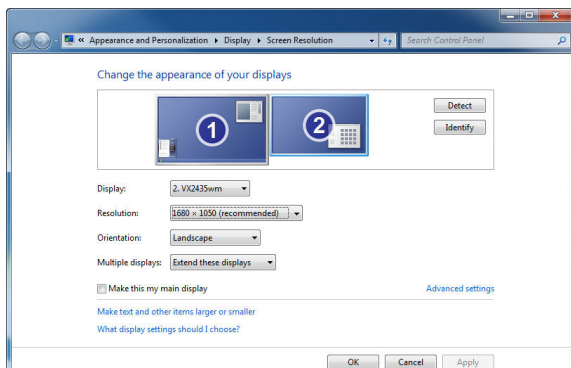
# Configuration

## Windows 2000/XP/Vista/7

To configure the image being displayed by the monitor that is connected to the USB video adapter, right-click on a blank section of the desktop, select **Properties**, then click on the **Settings** tab to display the following screen:



For Vista, right-click on a blank section of the desktop and select **Personalize**, then select **Screen Resolution** on the next screen. For Windows 7, simply right-click and select **Screen Resolution**.



Configure the secondary display by selecting it from the dropdown menu, then adjusting the desired settings:



## Using the Second Display in Extended Mode

In Extended Mode, the monitor that is connected to the USB video adapter creates an extension of the Windows Desktop displayed on the primary monitor. To set the display to function in this mode (once selected from the dropdown menu), check the box marked Extend my windows desktop onto this monitor, then arrange its position (virtually) with respect to the primary monitor by dragging the monitor icons (shown above as Primary/Secondary orientation) to reflect the physical orientation of the displays.

## Using the Second Display in Clone/Mirror Mode (default)

In Clone/Mirror Mode, the monitor that is connected to the USB video adapter simply mirrors the image displayed on the primary monitor. To set the display to function in this mode (once selected from the dropdown menu), uncheck the box marked Extend my windows desktop onto this monitor.

## Designating the Primary Display

To select which of the connected monitors will act as the primary display, select the monitor that will be used as the Primary Display from the Dropdown menu, and place a checkmark next to Use this device as the primary monitor. On some displays it is necessary to disable the main display (i.e. uncheck the box marked Extend my Windows display onto this monitor for the main display).

Following this change, the monitor connected to the USB video adapter will remain set as the primary display even if the computer enters hibernate mode or operation is suspended or powered down. If the monitor is disconnected from the USB video adapter, or the USB video adapter is removed from the host computer, the original monitor will revert to being the primary display.

## Alternate Configuration

Following the software installation for the USB video adapter, you may have noticed an icon in the taskbar as illustrated below. Clicking on this icon will open a menu that offers configuration of the display (connected to the USB video adapter):



Here, you can set the secondary display to act as an extension of the primary desktop (Extend), or as a mirror image that duplicates the contents on the primary display (Mirror) or set the display on the adapter as the primary display (Set as Main Monitor). If using a laptop, once the adapter is set as the primary display, the screen on the laptop can be disabled (Notebook Monitor Off).

### DisplayLink Manager

Screen Resolution

Screen Rotation

Extend To

Extend

Set as Main Monitor

Mirror

Off

Fit to TV...

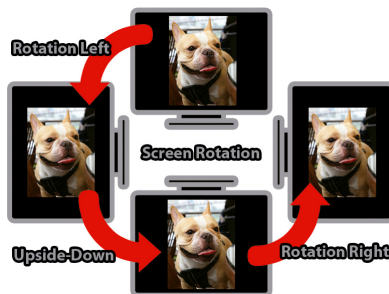
Advanced Configuration...

Similarly, the screen resolution, color quality, position of the screen and rotation of the screen can be adjusted from this menu.

To disable the secondary display, select Off.

### Screen Rotation

Will rotate the entire video output in 90 degree increments.



### Media Playback

Please note that while operating in Extended Mode, the USB video adapter can display media files and DVDs using a broad variety of media players, however in Clone Mode, limited support is available for video playback.

### Audio Playback

The audio component of the USB video adapter adds a new USB sound device to the system. This will be selected by default, but on some system it may need to be selected manually through the Sound and Audio Devices in the Control Panel. Audio will only be passed through the converter to the HDMI display. Any speakers connected directly to the computer system will not be active, while audio is being sent to the USB video adapter. If multiple USB video adapters are connected to the computer system, only one audio device can be used. So audio can only be output to one of the USB video adapters.

### Optimize For Video (Windows Vista/7 only)

Optimize video play back when using Windows Vista/7. Regular text may appear blurry while this is enabled.

#### DisplayLink Manager

Check for updates...

Optimize for Video

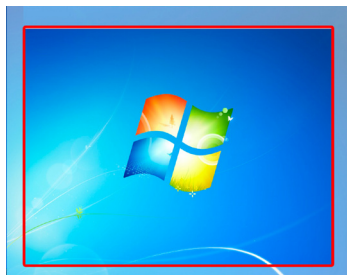
Fit to TV...

Advanced Configuration...

## Fit to TV

When using Extended Mode, if the Windows Desktop screen is not completely visible on the TV/Monitor, this option can be used to adjust the size of the Windows Desktop.

**NOTE:** This mode will only work while using Extended mode. If using Mirror mode, this will automatically change the adapter to Extended mode. This mode cannot be used at the same time as the Screen Rotation feature.

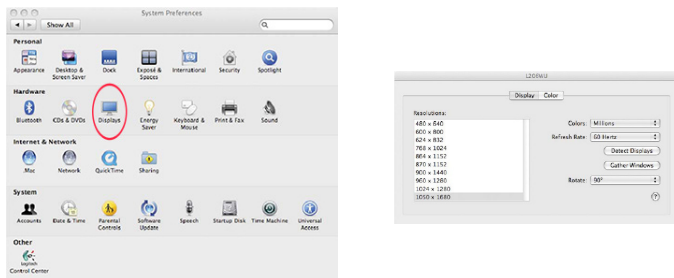


A red border will appear on the Extended screen that will show the size of the new Windows Desktop. Use the horizontal and vertical + and - buttons to manually adjust the size to properly fit the screen.

**NOTE:** Holding the CTRL key while making adjustments allow for finer control.

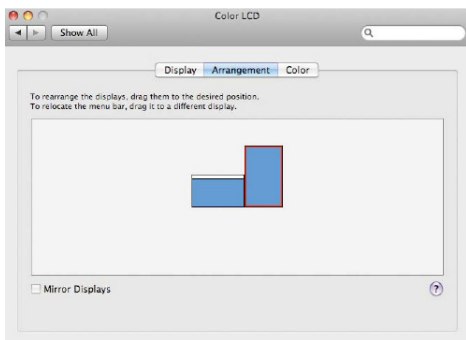
## Mac OS X (10.4.11/10.5.6)

To configure the display settings and monitor positions, bring up the **Displays** Preferences from the **System Preferences** menu:



The Display settings for each display will appear on the individual monitors themselves. To configure them all from a single location, press the “Gather Windows” button and each screen’s Displays Preferences windows will appear on that display.

All supported video resolutions will appear in the list on the left side. To change the positioning of each display, click on the “Arrangement” button (found only on the primary display) and you can then virtually reposition each display.



### Using the Adapter in Extended or Mirror Mode

By default the USB video adapter will be setup as an extended display. To change the display as a mirrored/cloned display, check the “Mirror Display” box on the “Arrangement” page for that monitor’s Displays settings window. To return the monitor to an extended display, uncheck this option.

To use both extended and mirrored displays simultaneously, turn off mirroring then in the “Arrangement” page press and hold the ‘cmd’ and ‘alt’ keys and drag and drop the display you wish to mirror over the primary display (shown with the white bar).

Repeat this with each display you wish to mirror, all others will act as an extended display.

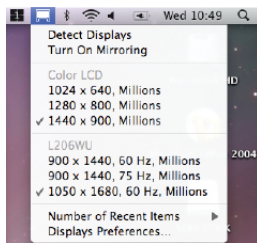
### Changing the Primary Display

You can change which display is the primary display by moving the Menu Bar between displays. Changing the primary display affects where new windows appear and the position of the Dock.

To move the Menu Bar, click the white menu bar and drag it to the display you wish to become the primary.

### Configuring Displays from the Menu Bar

If you have checked the “Show displays in menu bar” in the Display Preferences window, then you can configure displays by clicking the display icon in the menu bar. This will show a menu similar to the following:



### Media Playback

Please note that while operating in Extended Mode, the USB video adapter can display media files and DVDs using a broad variety of media players, however in Clone Mode, limited support is available for video playback.

### Audio Playback

The audio component of the USB video adapter adds a new USB sound device to the system. This will be selected by default, but on some system it may need to be selected manually through the Sound Preferences in System Preferences. Audio will only be passed through the converter to the display. Any speakers connected directly to the computer system will not be active, while audio is being sent to the USB video adapter. If multiple USB video adapters are connected to the computer system, only one audio device can be used. So audio can only be output to one of the USB video adapters.

## Specifications

|  |  |
|--|--|
| <b>Bus Interface</b>                                 | USB 2.0  |
| <b>Video Signal</b>                                  | HDMI 1.2 (digital)   |
| <b>Chipset ID</b>                                    | DisplayLink DL-165   |
| <b>Connectors</b>                                    | 1 x HDMI female<br>1 x USB mini-B female                                   |
| <b>LEDs</b>  | 1 x Power  |
| <b>Maximum Video Resolution</b>                      | 1920x1080  |
| <b>Audio Support</b>                                 | Yes (stereo)   |
| <b>HDCP Compliant</b>                                | No   |
| <b>Supported Number of Adapters<br/>(per system)</b> | 6 (Windows)<br>4 (Mac OS)  |
| <b>Operating Temperature</b>                         | 0°C ~ 70°C (32°F ~ 158°F)  |
| <b>Storage Temperature</b>                           | 0°C ~ 80°C (32°F ~ 176°F)  |
| <b>Humidity</b>                                      | 10% ~ 90%  |
| <b>Dimensions (LxWxH)</b>                            | 109.0mm x 52.0mm x 19.0mm  |
| <b>Weight</b>  | 300 g  |
| <b>Compatible Operating Systems</b>                  | Windows 2000/XP (32-bit)/<br>Vista/7 (32/64-bit),<br>Mac OS 10.4.11/10.5.6 |

## Technical Support

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## Warranty Information

This product is backed by a one year warranty.

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